

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A method for decomposing perfluoro compounds which comprises bringing a gas containing perfluoro compounds into contact with a solid reactant while heating, thereby fixing the fluorine component on said reactant, and with said reactant comprising an alkaline earth metal ~~compound~~ oxide and aluminum oxide.
2. (Currently Amended) A reactant for decomposition of perfluoro compounds, which contains an alkaline earth metal ~~compounds~~ oxide and aluminum oxide, wherein the earth metal oxide is present in an amount of 0.1 - 90 wt% and the alumina oxide is present in an amount of 99.9 - 10 wt%.
3. (Currently Amended) A reactant for decomposition of perfluoro compounds, according to claim 2, in which said alkaline earth metal ~~compound~~ oxide is magnesium oxide.

4. (Currently Amended) A perfluoro compounds decomposition apparatus which comprises a reaction section having an inner drum and an outer drum and filled with a solid reactant, gas flow passages capable of feeding a gas containing perfluoro compounds to said reaction section and of discharging a gas left after the reaction, ~~and~~ heating means for heating said reaction section ~~or~~ heating means for heating the gas to be fed to the same reaction section, ~~characterized in that~~ and cooling means for cooling the discharged gas, wherein said reactant is a reactant for decomposition of perfluoro compounds comprising an alkaline earth metal ~~compound~~ oxide and aluminum oxide.

5. (Currently Amended) The apparatus of claim 4, wherein the alkaline earth metal ~~compound~~ oxide of the reactant is magnesium oxide.

6. (Currently Amended) The method of claim 1, wherein the alkaline earth metal ~~compound~~ oxide of the reactant is magnesium oxide.

7. (New) The method of claim 1, wherein the gas containing the perfluoro compounds is contacted with the solid reactant at a flow rate of about 2 - 10 L/min. at a space velocity of about 100 - 2,000 hr⁻¹.

8. (New) The apparatus of claim 4, wherein the heating means for heating the gas to be fed to the reaction section comprises a heat-exchanger.

9. (New) The method of claim 6, wherein the magnesium oxide is present in an amount of 1- 70 wt% and the aluminum oxide is present in an amount of 99 - 30 wt%.

10. (New) A method for decomposing perfluoro compounds which comprises bringing a gas containing perfluoro compounds under heating into contact with a solid reactant, thereby fixing the fluorine component on said reactant, wherein said reactant contains an alkaline earth metal compound and aluminum oxide.

11. (New) A reactant for decomposition of perfluoro compounds which contains an alkaline earth metal compound and aluminum oxide, wherein the alkaline earth metal compound is present in an amount of 0.1 to 90 wt.% and the aluminum oxide is present in an amount of 99.9 to 10 wt.%.

12. (New) The method according to claim 10, wherein the alkaline earth metal compound is selected from oxides or hydroxides of Be, Mg, Ca, Sr or Ba.

13. (New) The reactant according to claim 11, wherein the alkaline earth metal compound is selected from oxides or hydroxides of Be, Mg, Ca, Sr or Ba.